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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

09/29/2003

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EXAMINER

JIANG, CHEN WEN

ART UNIT PAPER NUMBER

3744

DATE MAILED: 09/29/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/070,300

Applicant(s)

BRUZZO, VITALE

Examin r

Chen-Wen Jiang

Art Unit

3744

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The response presented by the applicant has been duly noted. In view of such, the previous rejections in the first office action have been withdrawn. However, an update search and further review of the prior art of record has prompted the presentation of new rejections presented below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7,9,11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau et al. (U.S. Patent Number 5,372,013 and 5,937,660) in view of Bawel (U.S. Patent Number 3,750,419), and vice versa

In regard to claims 7 and 11, Lau et al. disclose a quick cooling air conditioning system during startup as shown in the Fig.2. The system comprises a compressor 201, a condenser 202, a refrigerant reservoir 205, a valve at the upstream of the reservoir 206, a valve at the downstream of the reservoir 207, an optional valve 208, an expansion valve 203 and an evaporator 204. In operation, valves 206 and 207 are open. When the compressor is turned off, the valves 206 and 207 are closed. However, Lau et al. disclose the compression refrigeration system and do not disclose the absorption refrigeration system. Both compression refrigeration and absorption refrigeration are well known refrigeration system, e.g., Bawel discloses the absorption system to

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allow refrigerant saturate the evaporator in the same field of endeavor for the purpose quick startup. Lau et al. disclose the same start-up problem and provide the solution disclosed in the Application. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Lau et al. using to the absorption system in view of Bawel so as to have a quick startup.

In regard to claim 9, Lau ('013) discloses the reservoir 205 and valves 206-208 could all be manufactured into a single component.

In regard to claim 12, Lau ('660) discloses the sequence of turn off compressor. First, valve 207 is closed thereby stopping the flow of refrigerant from refrigerant reservoir 205. Next, compressor 201 is turned off. As compressor is turned off, controller 209 closes valve 206.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lau et al. and Bawel as applied to claims 7,9,11 and 12 above, and further in view of Zimmern (U.S. Patent Number 4,509,341) or Giacometti et al. (U.S. Patent Number 5,351,504).

Lau et al. and Bawel disclose the invention substantially as claimed. However, Lau et al. and Bawel do not disclose electrovalve. Zimmern and Giacometti et al. disclose electrovalve in the same field of endeavor for the purpose of control refrigerant. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Lau et al. and Bawel with an electrovalve in view of Zimmern and Giacometti so as to control the refrigerant flow.

Allowable Subject Matter

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (703) 308-0275.

The examiner can normally be reached on Monday-Thursday from 6:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Maust can be reached on (703) 308-3390. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5648.

Chen-Wen Jiang
Primary Examiner

A handwritten signature in black ink, appearing to read 'C. W. Jiang', written over a horizontal line.